

# The Allergy and Environmental Health Association

## QUARTERLY

Fall / Winter 1992, Volume XIV, Nos 3 & 4

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## THE AEHA QUARTERLY

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### DISCLAIMER

The Quarterly does not offer medical advice. Persons wishing to experiment with changes in their lifestyle should consult a physician knowledgeable in environmental medicine. The opinions expressed herein are not necessarily those of the Allergy and Environmental Health Association of Canada.

### MANDATE

The AEHA Quarterly is the journal of the Allergy and Environmental Health Association of Canada, a non-profit, registered charity. The Association is concerned with the effects of environmental factors on human health. The Quarterly publishes both scientific and personal material, reflecting the needs and interests of persons with environmentally related illnesses.

The Association's mandate is to increase awareness of environmentally related illnesses, stressing recognition, prevention, and treatment, and to advocate for fair and equitable treatment of affected persons.

### ENVIRONMENTAL SENSITIVITIES

A growing segment of the population experiences a variety of adverse reactions to environmental agents at levels well below those that might be deemed to affect average persons. This atypical reactivity is called Environmental Sensitivity.

Subsections of Environmental Sensitivity include labels descriptive of the site of the reaction such as "Asthma"

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( lungs ), or of the mechanism of the reaction such as " Allergy ", or of the causative agents such as " Multiple Chemical Sensitivity ", or " Electromagnetic Sensitivity ".

Typical agents include food, water, airborne substances, electromagnetic fields, and materials typically encountered in our daily lives, including both physiological and psychological stressors.

Sensitivity is highly individualistic, affecting each individual in a unique way, making definition, diagnosis and treatment difficult. Severe sensitivity is called " Hypersensitivity " and in some extreme instances where a person has a sudden attack called " Anaphylaxis " the condition can be fatal. Symptoms may be mild and merely annoying, or they can be severe enough to interfere with daily activities, family life and career.

Environmental Sensitivity is a degenerative illness. Prevention, early detection and treatment are therefore of paramount importance in dealing with this illness. Treatment of Environmental Sensitivity focuses on prevention, prudent avoidance of offending agents, appropriate nutrition, counselling and medical intervention when needed.

Environmental Sensitivity is a relatively new field and as such it is subject to considerable variation in interpretation. Environmental Sensitivities have been officially acknowledged as legitimate and compensable disorders by many governments, agencies and research establishments. As a result of this official

recognition, sensitivities and other possibly related immune system disorders are receiving increased funding for research and awareness activities. The Allergy and Environmental Health Association commends those individuals who fought against great odds both professionally and as affected individuals to achieve this recognition.

AEHA is working with various related agencies and research projects and will report on the progress of these initiatives as they progress.

### PRESIDENT'S MESSAGE

I would like to thank the various agencies, professionals and individuals who have been responsible for the rapid gains in official recognition and research activity over the past year. They include, but are not limited to:

Canada Mortgage and Housing Corporation and the Secretary of State for funding research and outreach materials related to environmentally appropriate housing;

The Royal Architectural Institute of Canada, the American Institute of Architecture and the American Society for Testing and Materials and their environment committees for setting aggressive goals for integrating environmental considerations into our major exposure pathway, the built environment;

Health and Welfare Canada, The U.S. National Academy of Sciences, and the

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[ Human Rights departments ] in both countries for solidifying their support for research, and for accommodating our needs;

The Canadian and American Academies of Environmental Medicine and other specialties for their unfailing belief in their patients;

The many individual professionals who have sacrificed more than many will ever know to stand by their beliefs against all odds;

And to all those who have suffered not only the ravages of a vicious illness but the far more devastating pain of social and professional ignorance and abuse.

It is time to acknowledge that Environmental Sensitivities have been recognized and that substantive proof has been demonstrated. 1992 marks an important watershed in our affairs. We are no longer burdened with the fundamental problem of establishing the legitimacy of our illness, therefore our emphasis must change to a more proactive role in the areas of accommodation and prevention which recognition facilitates.

### NEWS

#### WEATHER and HEALTH WORKSHOP

Environment Canada, Health and Welfare Canada and the Canadian Meteorological and Oceanographic Society held a workshop on weather and health in Ottawa on November 19-20, 1992. Several of

our members attended, and Julie Van Vleet will summarize the proceedings for our next issue.

The workshop introduction included the following overview:

" Researchers, particularly from Europe, have found evidence for associations between the atmosphere ( air quality, climate and day- to- day weather ) and human health including areas such as:

- general well-being
- accident proneness
- infectious diseases
- neurological-psychological diseases
- cardiovascular diseases
- blood-clotting system
- respiratory diseases, and
- mortality

The workshop was convened to raise awareness of these issues and to explore opportunities for research, product and service development. For additional information contact:

Mr. D.A. Bourque,  
Atmospheric Environment Service,  
Environment, Canada,  
4905 Dufferin St. Downsview, Ont.  
M3H 5T4  
Ph: ( 416 ) 739-4996  
Fx: ( 416 ) 739-4265

Our thanks to the organizers and their agencies for hosting this important workshop and for inviting our participation.

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### THE CANADIAN MEDICAL METEOROLOGY NETWORK

Some of the physicians and researchers involved in the previously mentioned workshop have established the network to raise awareness, facilitate research and exchange information. Their preamble states:

" Practitioners with whom we have spoken in the last few years have repeatedly echoed a similar refrain: there are often, amongst their patients, ill-defined ailments which seem suspiciously weather related". A review of the world-wide literature reveals extensive research has been conducted. It is scattered over 50 years, conducted in many countries and published in many journals and many languages.

No good source exists for the exchange and promulgation of the existing knowledge. Nor did we find any existing capability for interested persons to discuss their interests, ideas and research.

It is for these reasons that we have created the Canadian Medical Meteorology Network.

For information , and newsletter subscription, contact:

Dr. John Bart  
Bathurst-Steeles Health Centre,  
6257 Bathurst St., 2nd Floor,  
Willowdale, Ontario, Canada,  
M2R 2A5  
Ph: (416) 223-9791  
Fx: (416) 229-1450

### The 13th International Congress of Biometeorology

The congress will be held in Calgary Alberta on September 12-13, 1993. in Calgary, Alberta.

The theme will deal with " Adaptations to Global Atmospheric Change and Variability".

Study group ( 4 ) dealing with Climate, Morbidity and Mortality, ( 5 ) Weather and Health, ( 7 ) Effects of Ultraviolet Light, ( 8 ) Photoperiodism and Biological Parameters in the Biosphere, and ( 12 ) Physiochemical and Biological Fluctuating Phenomenon. may be of interest to people with allergies, sensitivities , migraine and respiratory illnesses.

For information and abstracts contact:

Dr. N.N. Barthakur, Secretary,  
Organizing Committee,  
Dept. of Renewable Resources,  
McGill University- MacDonald Campus,  
21 - 111 Lakeshore Rd.,  
Ste-Anne-de-Bellevue, Quebec, Canada,  
H9X 1C0  
Ph: (514) 398-7939  
Fx: (514) 398-7983

### THE CLIMATE ADAPTATION NETWORK

The Climate Adaptation Branch of the Canadian Climate Centre has initiated a networking process to raise awareness and foster research into global and regional warming issues. The Centre is publishing a newsletter, Climate Adaptation News, from

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which the following items are adapted:

" As agreed at the Earth Summit in Rio and spelled out in detail in the Agenda 21 document, environmental considerations have to be closely integrated into economic development. This includes the interaction of economic activities and climate."

The Centre states that " we must recognize that we are already committed to some global warming." and that we must therefore " develop new understanding, new policies and priorities that will minimize the impacts of climate change and ensure that new opportunities to benefit from climatic resources are identified and seized. This is in addition to changing those attitudes and behaviours which are the cause of global warming".

Several research and education initiatives are underway including The Project on Social Learning in the Management of Global Environmental Risks which is tracing the changes in key variables including climate change, stratospheric ozone depletion and acid / oxidants pollution, in several European and North American countries.

At the regional level, the Great Lakes - St. Lawrence River Basin Project on Responses to the Impacts of Climate Change, is oriented towards " identifying actions to minimize future impacts and to take advantage of opportunities that arise. The focus of the research will be on two issues, water supply and water quality. Ecosystem and human health, and land use will be related to them.

*These issues are of significant importance to persons with climactically related illnesses. The warming of our climate and changes in weather such as increased cloud cover and precipitation can significantly alter key allergy and sensitivity profiles, including the pollen and mould seasons and types, and may extend the seasons considerably. In addition, many species that are cold intolerant will migrate north to increase the number of agents affecting sensitive individuals. Crops, buildings, transportation and recreation may also be negatively affected.*

### THE CANADIAN GLOBAL CHANGE PROGRAM

This program has similar objectives including a specific panel on health issues headed by:

Dr. John Last  
Department of Epidemiology  
University of Ottawa,  
Ottawa, Ontario, Canada, K1P 6N5

To order a copy of the newsletter contact:

Climate Adaptation Branch  
Atmospheric Environment Service  
4905 Dufferin Street,  
Downsview, Ontario,  
Canada, M3H 5T4  
Ph: ( 416 ) 739-4343  
Fx: ( 416 ) 739-4297  
Also E-Mail and WEB: CADAPT

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### THE ASTHMA SOCIETY OF CANADA

Their newsletter Attack on Asthma notes that Dr. Robert Hamilton at Johns Hopkins School of Medicine has determined that proteins deposited by cockroaches as well as dust mites and mould the most potent allergens; that most children with asthma are sensitive to them and that they are present in most of their homes, especially in urban settings.

Management strategies are discussed including the odd observation that cockroach populations are lower in homes with cats, which is little comfort to the average asthmatic.

The newsletter notes that asthma is the leading cause of school absenteeism and of child emergency room visits. Also noted is a paper indicating that "the airways of newborn animals are "hyper-responsive" and that for some unknown reason, the reaction decreases as the animal grows older."

#### Contact:

The Asthma Society of Canada  
130 Bridgeland Ave., Suite 425,  
Toronto, Ontario, Canada, M6A 1Z4  
Ph: (416) 787-4050

### SUNSCREENS

For a list of sunscreens endorsed by the Association contact your local branch of the Canadian Cancer Society. Note: many people react to PABA.

### THE NATIONAL POPULATION HEALTH SURVEY

One of the objectives of the survey is "To aid in the development of public policies designed to improve health, by providing measures of the level, trend and distribution of the health status of the population; to provide data for analytical studies that will assist in understanding the determinants of health and to collect data on the economic, social, demographic, occupational and environmental correlates of health; and to increase the understanding of the relationship between health status and the use of health services, not only in the traditional sense, but also in areas such as home care, self-medication and self-care".

These are very important issues that must include an awareness of our sensitivity illnesses. It is therefore important for the Association and its members to actively participate in providing information to the survey and to the Exposure Registry (to report adverse reactions). If you do not register adverse reactions or state your case when statistics are referred to sensitivity illnesses will be absent and therefore determined to be unimportant and will receive little funding and attention.

The National Health Information Council is the Management Committee responsible for this project. Contact:

The Task Force on Health Information  
Statistics Canada, 24th. Floor,  
R.H. Coats Building, Ottawa, Ontario,  
K1A 0T6

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### INDOOR AIR 93

July 4-8, 1993, Helsinki, Finland  
P.O. Box 87, SF-02151, Espoo, Finland,  
Fx: (+358-0-451-3611

### CHEMICAL SENSITIVITIES AND THEIR RELEVANCE TO PSYCHIATRIC DISORDERS

Health and Welfare Canada Workshop  
December 7, 1992

The workshop objectives were :

To stimulate further research into MCS and advise on research priorities; to consider the operational definition of MCS proposed by Miller and Ashford, and if thought to fit, to promote its use in further research;

To assist practitioners in the management of persons who present with a syndrome that is compatible with a diagnosis of multiple chemical sensitivities ( and its discrimination from psychiatric illness ) by providing an appropriate background document.

Health and Welfare Canada brought together several of the most accomplished professionals working in this area including Dr. Iris Bell, Dr. Nancy Fiedler, Dr. Susan Abbey (CFS), Dr. Nicholas Ashford, Dr. Claudia Miller, Dr. Eric Nisbett-Brown, and Dr. Gerald Ross. Each expert outlined their position in a morning session and participated in workshops in the afternoon, followed by a summary session.

The material presented was highly valuable and is representative of the very

high calibre of work and knowledge that is now available. A summary of papers presented will be included in a future Quarterly when available.

A copy of the proceedings may be ordered from:

Mental Health Division  
Health Services Directorate, Room 658  
Jeanne Mance Building,  
Ottawa, Ontario, K1A 1B4  
Ph: (613) 954-8643

### SEASONAL AFFECTIVE DISORDER AND THE USE OF LIGHT AS AN ANTIDEPRESSANT

Frederick M. JACOBSEN M.D. MPH,  
Clinical Psychology Branch,  
National Institute of Mental Health,  
Bethesda, Maryland. and

Norman E. Rosenthal, M.D.,  
Director of Outpatient Services,  
Clinical Psychology Branch,  
National Institute of Mental Health,  
Bethesda, Maryland.

Directions in Psychiatry, Vol 6, Lesson 3

Drs. Jacobsen and Rosenthal write: "The approach to treatment involves regular exposure for anywhere from 2 to 6 hours a day to bright light ( 2500 lux of full spectrum light ). In receptive patients, improvement is often seen within a few days; relapse occurs if the program is terminated before natural, seasonal conditions change to provide the patient with more natural light."

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SAD light therapy units can be imported but they are very expensive, however you can make one up from standard parts which is probably just as good as the custom one. Vitalights and black lights have to be special ordered or obtained from specialty suppliers like Smiths Pharmacy.

A SAD light therapy unit can be constructed by ordering a four tube fluorescent fixture with a parabolic reflector and an electronic ( high frequency ) ballast. Place three full spectrum ( Vitalight ) and one black light ( UV ) tube in the fixture and use either no louvre or an open eggcrate type. A plastic sheet louvre would negate the effect of the beneficial UV from the tubes. A black light tube is in the safe or therapeutic range and is not the same as a UV sterilizing lamp which would be deadly. A four foot fixture assembly is less expensive than a two foot due to the immense difference in production and distribution economies of scale. The custom units have a radiation shield over the cathode but the need for it is not definitive.

An electronic ballast is essential if you want to avoid the electromagnetic fields from conventional ballasts and daylight etc. Daylight tubes are **not** full spectrum tubes. It is best to mount a SAD unit in the area where you spend the most time in order to maximise your exposure, ie.the kitchen, study etc.

### UNIVERSITY OF TEXAS MCS STUDY

Dr. Claudia S. Miller  
The University of Texas Health Science Center at San Antonio,  
7703 Floyd Curl Drive, Room 613L

San Antonio, Texas 78284-7815  
Ph: ( 512 ) 567-5314

Dr. Claudia S. Miller ( Ashford Miller Report ) is conducting a study of individuals who attribute the onset of their chemical sensitivities to either one of the following:

An organophosphate or carbamate pesticide, such as Diazinon or Dursban, or

Remodelling in a home or business.

" We are looking for individuals who have had such exposures to participate. The study involves only the completing of an extensive questionnaire. There will be no need for individuals to travel, so distance is not a problem. It is our hope that this study will facilitate the development of a case definition for chemical sensitivity and suggest fruitful avenues for future study.

**If the onset of your sensitivities was associated with renovation or pesticide exposure please respond.**

### INNOVATIVE HOUSING '93

A world conference on advanced housing for energy-efficiency and environmental responsibility.

June 21-25, 1993, Vancouver BC, Canada,  
Contact: Darinka Tolot, EMR /  
CANMET,  
580 Booth St. 7th.Fl. Ottawa,  
Ontario, Canada,  
K1A 0E4  
Ph: ( 613 ) 943-2259  
Fx: ( 613 ) 996-9416

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### VITAMIN C and HEART DISEASE

Linus Pauling in *Health Naturally Magazine* reports that conclusive evidence now shows that vitamin C deficiency is related to heart disease and that supplementation reduces the incidence of heart attacks by fifty percent.

### TUFTS UNIVERSITY TEACHES ALTERNATIVE MEDICINE

Bill Reynolds reports in *Health Naturally magazine* that the most popular elective at Tufts University School of medicine is a course in alternative medicine, including Clinical Ecology.

Health Naturally Magazine  
Box 149, Nobel Ont. P0G 1G0

### CHEMICAL SENSITIVITY, VOL 1

Dr. William J. Rae ISBN 0-87371-541-1  
Lewis Publishers, 1992

The forward to the book states:

"*Chemical Sensitivity* is the first major scientific book on chemical sensitivity, an increasingly important worldwide health problem. The book features results from studies of more than 20,000 environmentally sensitive patients at the Environmental Health Center (EHC) in Dallas. Results from the studies at EHC are supplemented by information accumulated from the treatment and study of an estimated 100,000 patients by other environmentally oriented physicians and scientists around the world. The book emphasizes the importance of

environmental pollutants on known mechanisms of immune and non-immune detoxification systems and emphasizes the importance of maintaining a balance between endocrine, immunological, and neurological systems and their nutrient fuels.

*Chemical Sensitivity* is the first volume of a four-volume work on chemical sensitivity. This volume provides a comprehensive explanation of the field of chemical sensitivity, identifies the basic principles used for its diagnosis and treatment, examines immune and non-immune mechanisms that explain the body's processing of pollutants, and discusses nutrition as the fuel for the endocrine, immunological, and neurological systems to respond to pollutant exposure.

Environmentally oriented physicians, allergists, nutritionists, physicians in preventive and occupational medicine, and medical students will find that *Chemical Sensitivity* is truly a magnum opus in the field of toxicology and will prove to be a classic reference."

This book is a giant step in terms of both its scope and presentation. It covers an incredible amount of territory and detail with references, in a readable format. Anyone who wants to move up in their understanding of the biochemical mechanisms involved in chemical sensitivity will have to read this book.

This is a professional text and would be very difficult for anyone without reasonable knowledge of chemical sensitivity, chemistry and anatomy, however the book is remarkable in that anyone could read and

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understand most of the general material without having to read the heavy reference sections. The reference sections discuss the technical details in more depth but essentially cover the same material. This \$ 100.00 book is worth every penny if you are serious about the subject.

I have a copy and have read the first section. When I have read the full text I will provide a synopsis of the important information presented. Ed. Lowans

### MORE HOSPITAL SMOKESTACK LIGHTNING

To the Editor:

A provincially owned and operated institution in Moncton continues to emit excessive amounts of pollution from the smokestack. This institution has long been aware of the problem resulting in property damage and adverse effects to human health. In spite of this information the Province of New Brunswick continues to allow this institution to operate under such conditions. Doesn't this amount to negligence?

Press releases from this provincially owned institution will only mention soot, and do not address other pollutants such as chemicals that erode property, toxic gasses, carcinogenic particles, nor irritants or sensitizers that adversely affect human health.

The problem appears to stem from poor quality fuel, and incomplete combustion. In addition, the possibility of the smokestack temperature being inadequate to push the

emissions up into the atmosphere. If this is not enough, the soot from the past operations of the incinerator has caused such a build up in the smokestack and ductwork that it ( and other residues ) contributes to air pollution.

The only deadline the province has imposed is Oct. 13, 1992 for cleaning of the duct work! The other problems continue to exist causing property damage and adverse effects to health.

Perhaps a privately owned business would not be permitted to continue operating in such a manner. Nevertheless, the public is demanding that this provincially owned and operated institution clean up its act and work within the framework of the environmental laws to prevent further property damage, not only to private citizens but also to municipally owned and provincially owned property; damage which taxpayers will eventually be asked to pay for.

During May 1990 the provincial minister of health was reported as saying that this ministry "...supports the creation of healthier environments...and an emphasis on health promotion and disease prevention." ( Frenette Outlines Health Strategy Goals for Year 2000 " the Times-Transcript, May 25, 1990 P.20.

The citizens of Moncton are demanding that this pollution stop and that the Province of New Brunswick take action to reflect such.

Marilyn Shaw-Guisset  
Moncton N.B.

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### MORE on LYSOL.

20th Century Living reports that Lysol contains both phenol and dioxin. Again we urge school and pre-school officials to use extreme caution with consumer products which are exempt from Workplace Hazardous Information Sheets [WHIMIS] etc. regulations. It is extremely difficult to obtain the information that is needed to determine the safety of these products for adult use, let alone for children. The distributors of these products are not aware of the formulas of their own products. It should be remembered that exposure limits do not apply to children. WHO authorities are opposed to the use of exposure limits for children and state that at the very least these numbers should be divided by ten.

Also in 20th Century Living is a warning about insecticidal chalk. I have seen this product promoted by sales reps as an environmentally safe, ancient oriental formula. It is a standard, regulated pesticide in a chalk base and is not safe in any way. The impression that it is safe further endangers children and pets. Similar claims for diatomaceous earth, borax and pyrethrins etc. should be viewed with extreme caution. All are toxic if inhaled or ingested but may be better options than regular pesticides if used properly.

### AMA REMAINS NEUTRAL on CLINICAL ECOLOGY

by Earon S.Davis, J.D,M.P.H.

The final proceedings of the December 1991 meeting of the American Medical Association House of Delegates have been

released and confirm the AMA's neutral stance on "Clinical Ecology." The recommendations of the Delegates, which are the only official AMA policy on "Clinical Ecology", are that:

1. The American Medical Association continue to monitor the published literature on clinical ecology and report as appropriate.
2. Those who support a new test, procedure or treatment must prove by appropriately controlled peer reviewed trials that it is effective for the purpose for which it is used and that the burden should not be shifted to opponents to prove that a new test or therapy is invalid.
3. These recommendations be adopted in lieu of Substitute Resolution 6 ( I-90 ).

These policy statements of the American Medical Association are in contrast with the findings of an AMA Council on Scientific Affairs ( CSA ) report. Known as Report K, the CSA findings included "That there are at this time no well-controlled studies establishing a clear mechanism or cause for the multiple chemical sensitivity syndrome." The additional finding was "That there are at this time no well-controlled studies providing confirmation of the efficacy of the diagnostic and therapeutic modalities relied upon by those who practice clinical ecology." Neither of those findings were adopted as AMA policy.

Report K, which was prepared in May of 1991, was "highly inaccurate and not consistent with accepted academic standards for such reports," according to Gary R.

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Oberg, M.D., past president of the AAEM. [ The American Association of Environmental Medicine ] Following are several key points relevant to the AMA action.

1. The CSA Report, and its findings, are not the policy of the American Medical Association. Please inform AAEM immediately, and with detail, if anyone encounters this report or findings represented as AMA policy. We have avenues for correcting such misrepresentations.

2. The CSA Report does not refer to the American Academy of Environmental Medicine or our published practice guidelines or position statement. Therefore, what is evaluated is some undefined concept of " clinical ecology" and not AAEM positions or the activities of AAEM members.

3. The CSA Report has been suspended by reports such as the 1992 National Academy of Sciences report, " Multiple Chemical Sensitivity." which accepts that a substantial public health problem exists related to this illness and includes many favourable references to Theron G. Randolph, M.D. and a chapter by William J. Rea, M.D.

4. The CSA Report relies heavily upon discredited past position papers and studies written by Abba I. Terr, M.D. These positions have been seriously undermined by a second 1992 report by the National Academy of Sciences, entitled " Biological Markers in Immunotoxicology" which addresses Dr. Terr's work as follows ( Page 135 ): " Terr's

conclusions are poorly supported opinion expressed by one who has evaluated patients on behalf of a workers' compensation appeals board."

5. The CSA Report distorts " Clinical Ecology " as consisting of four controversial syndromes, multiple chemical sensitivity syndrome, candida hypersensitivity syndrome, chronic fatigue syndrome and sick building syndrome. This supports the notion that whatever CSA was evaluating it had only tangible relevance to the American Academy of Environmental Medicine as a multitude of physicians are addressing these issues who have not even heard of " Clinical Ecology."

Even so, since the CSA Report was written in May of 1991, chronic fatigue syndrome, multiple chemical sensitivity and sick building syndrome have all been confirmed as important medical problems by the National Academy of Sciences and other published research. For example, the NAS Biomarkers report concluded. " Because sick building syndrome appears to be a real phenomenon caused by contamination of indoor air that causes discomfort to a substantial number of workers, indoor air pollution standards for homes, schools, and workplaces should be established."

6. As the CSA document states, " The Council on Scientific Affairs recognizes that the above findings are those existing at one point in time, and welcomes the opportunity to review well controlled studies as they become available." One must wonder how many years ago the " point in time " was when the CSA report was

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accurate, let alone a state of the art report. More important, however, is the fact that the CSA report offers nothing for the people suffering from these illnesses which it refuses to recognize. It is oblivious to the harm which may result to many people with serious illnesses due to the ways in which the report is likely to be used by insurance companies to deny medical benefits.

Following are some statements in the CSA report which demonstrate its lack of current relevance:

"...the AMA Council on Scientific Affairs believes that multiple chemical sensitivity should not be considered a recognized clinical syndrome."

" Evidence that this syndrome ( sick building syndrome ) exists as a separate disease entity is weak. Some have claimed that mass hysteria and other psychological factors are responsible for symptoms."

### CONCLUSION

The American Medical Association has taken a neutral position on clinical ecology, and not directly addressed Environmental Medicine or the American Academy of Environmental Medicine. The dated and inaccurate report of the AMA's Council on Scientific Affairs is of little concern. However, if it is represented as AMA policy, the Academy must be advised so that corrective action can be taken.

This situation should not be seen as a very positive development for those practising Environmental Medicine. As we continue to investigate the impacts of the

environment on the health of the individual, it is clear that our message is being heard.

The Environmental Physician,  
Summer 1992

### **ENVIRONMENTAL IMPROVEMENTS BENEFIT HEALTHY PEOPLE**

"AAEM is gathering accounts of situations where your suggested changes in the workplace, school, or home have ended up helping people beyond your patient. These accounts will be gathered for future use by reporters and other writers. Please send a letter describing specific situations of "unintended positive impacts" to Earon S. Davis, 2530 Crawford Ave., Room 115, Evanston, IL 60201. While we have a special interest in situations where some documentation exists ( eg., absenteeism decreased in a classroom or office after it was "cleaned up" for a chemically sensitive person ), all accounts will be helpful."

The Environmental Physician,  
Summer, 1992

### **IT IS ALL IN YOUR HEAD: PART 2**

by Sherry Rogers M.D.

### Do You Have The Pesticide Plague?

Agriculture boasts that bold new herbicides are on the way. In many studies of the commonest side effects of pesticides, forgetfulness and fatigue have been way ahead of all the other symptoms ( Metcalf and Holmes, Annals of New York Academy of Sciences, volume 160 ).

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Pesticide poisoning can be one of the most insidious diseases. Chlorpyrifos (Dursban) is commonly sprayed in offices, schools, homes, apartment houses, churches, businesses and restaurants in the U.S. Studies show that in office occupants there was a wide range of individual susceptibility. In some the symptoms were abrupt, while in others they were gradual, slowly built up so that rarely did the victim relate cause and event. Exhaustion, poor memory, and inability to concentrate predominated in some, while poor balance and loss of coordination occurred in others. These are two symptoms that are expected with age and not easily measured, proven or tested. Therefore they tend to be discounted.

Other studies confirm (Organophosphate poisoning in office workers, Journal of Occupational Medicine, 28, 1986, Hodgson et al) that once inside the body, these chemicals get stored in tissues that slowly release small amounts of the pesticide back into the bloodstream over months! So a one-time exposure can give a dose that persists and causes continual baffling symptoms while the level in the blood is too small to be measured by regular medical tests. Meanwhile the level in the office air has dissipated, so there is no proof.

In addition you can easily appreciate how this constant infusion of a potentially toxic chemical can increase your vulnerability to all other chemicals. It's like standing on one leg; you are much easier to push over.

Some people have delayed symptoms

( Neuro-toxic effects of organophosphorus insecticides, N. Engl. J. Med., 316, Senanayake, N., 1987 ) that don't appear for weeks after the exposure like vague numbness and tingling. With each subsequent exposure or dose, the person gradually deteriorates while medicine remains baffled. All the while, any new chemical or drug, even a simple aspirin or pain pill can become the final straw that pushes the detox system over, and suddenly we have a full-bloom case of E.I., reacting to everything ( Interaction between acetaminophen and organophosphates in mice, Res. Comm. in Chemical Pathology and Pharmacy, 44, 1984, Costa, L. ).

In 1985 when Drs. Randolph, Rae and I were lecturing through China, I took a photograph of a government worker applying pesticides to the trees along the side of the road. He was standing on top of his truck with his hose aimed at the top of the trees. Unfortunately, just a few feet on the other side of the tree tops were open apartment windows. The apartments hug the tree lined streets very closely in China. So some of this pesticide was being sprayed directly into the open unscreened apartment windows. But this invasion of one's health is minuscule when we compare it to what we have done in the United States to our citizens.

As scary as this scene appeared, what we do is even more ludicrous, in terms of pesticides and needless exposures to them. Businessmen who fly frequently on international flights are exposed to pesticides, as well as the air line staff themselves, as they run up and down the isles squirting a pesticide that is hardly

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going to make one bit of difference to an insect hiding inside a passenger's clothing or bags. The whole plane would have to be fumigated to the point that everyone would have tearing eyes and paroxysmal coughing to make this effective. But this amount of pesticide, especially repeatedly, adds to the total load or total body burden of other pesticides that people are exposed to nearly constantly in many different environments ( homes, offices, stores, institutions, food, water, construction materials, clothing, books, plastics, and more ), which have caused serious disease. Don't forget these bio-accumulate. That means the body just stores and stores these. And some it never gets completely rid of. So when you hear someone say, "Oh don't worry it's such a tiny amount it couldn't hurt you", you know they are utterly obtuse to the chemistry of pesticides. For example, one spraying of chlordane for control of termites lasts for 20 years in the soil. Its metabolism in the body is highly individual and some just can't get rid of it. And it's the lifelong accumulation of these "tiny" amounts that has caused undiagnosable depression, exhaustion, anxiety, poor balance, loss of nerve function, and death. Or have gone on to initiate Environmental Illness with all of these symptoms and more as the person began reacting to moulds, foods, and other chemicals.

Since the commonest pesticide poisoning symptoms are subtle, most people do not even know that they have been exposed. They consist of confusion, fatigue, poor concentration, poor memory, irritability, poor libido ( sex drive ), and slow thought process. ( Feldman American Journal of Industrial Medicine, 1980 ). If

you complained of these to a doctor untrained in environmental medicine, you're more likely to be handed a tranquilizer, after an exam.

A commonly sprayed pesticide like diazinon is used routinely in apartment buildings, schools and offices. Its residues and inhibition in lab animals were highest in the kidney and brain ( Tomokuni, K, et al, The tissue distribution of diazinon and the inhibition of blood cholinesterase activities in rats and mice receiving a single intraperitoneal dose of diazinon, Toxicity, 37, 1-2, 91-98, Oct., 1985 ). Again it depends on the individual whether he will have long range, short range, or no effect. Bear in mind it is usually accompanied by another pesticide as well as the "inert" solvent vehicle. The cumulative and synergistic effects are unknown, and pose a dual problem: (1) many pesticides can not be completely metabolized and excreted by the body, so they accumulate in the body with each exposure, and (2) the action of two different pesticides when combined together can be more damaging to the body than the sum of the two given individually. This is possible, for example, when one inhibits the metabolism of the other and causes a build up ( or biochemical bottleneck for other chemicals ).

The "inert" ingredients, which are the vehicle or carrier, contain even worse chemicals than the pesticide itself. This is the liquid in the bottle which the potent poison is riding in. The poison is so potent, that only a small volume can be used. In order to disseminate it widely throughout a room, for example, it is put in a larger volume of "inert" diluent so it can be

sprayed about. For many of these, less than a teaspoon of the undiluted pesticide can be lethal to a 200 lb. man. The label makes this diluent appear harmless when it reads " 99% inert ingredients ". But diluents or " inert ingredients " are far from being truly inert, as they frequently contain acetone, methyl cyanide, benzene, toluene, phenol, kerosene, xylene, dioxin, formaldehyde, ethylene dibromide, trichorethylene, chloroform, carbon tetrachloride, methyl methacrylate, and much more. [ editors note: the new term for diluents or inerts is formulants ]. Yes, you have learned that these are some of the very same chemicals that outgas from our modern homes and offices that cause Environmental Illness. Only now they are linked with even more toxic chemicals ( the pesticides ), often causing cumulative and irreversible nervous system damage ( Cassaretti and Doull's Toxicology ). Frequently even outlawed pesticides are hiding in those inert ingredients, and add power to the punch. Plus if they are classified as inert, they become part of the proprietary trade secret. So it is to the manufacturer's benefit to have as contaminated a product as possible when it comes to " inert " carriers or solvents.



Anyone who tries to convince you that pesticides are harmless is either uninformed or has an ulterior motive from which he will reap the rewards.

You'll recall that common solvent symptoms ( not only from regular hydrocarbon inerts, but from the home and office ) are also poor memory and inability to concentrate confusion, paresthesias ( numbness and tingling ), dizziness, hyperacusis ( average noises seem uncomfortably loud ), nervousness, depression, compulsion, irritability, apathy, weakness, tremor, ataxia ( poor equilibrium or balance ), and exhaustion. Panic disorders are also caused by these solvents ( Dager, SR, et al, Panic disorder precipitated by exposure to organic solvents in the work place, American Journal of Psychiatry, 144:8, 1056-1058, Aug., 1987 ). So not only can everyday chemicals make you an exhausted space cadet, but so can the pesticides, and so can their " inert carriers " ! It's a wonder that anyone can think and emote with all their faculties ( and we haven't even talked about the sugary breakfast cereals and their effect on brain power and mood ).

## QUICK STOP SUMMARY

So in essence, pesticides are like a triple whammy when it comes to the damage they can do. Ironically they frequently cannot be smelled as other chemicals often can, and they are usually commercially sprayed at night in offices with the housekeeping chores so you are unaware of their existence. Most people have multiple sources of exposure and generally the more public a place is, the more it is sprayed.

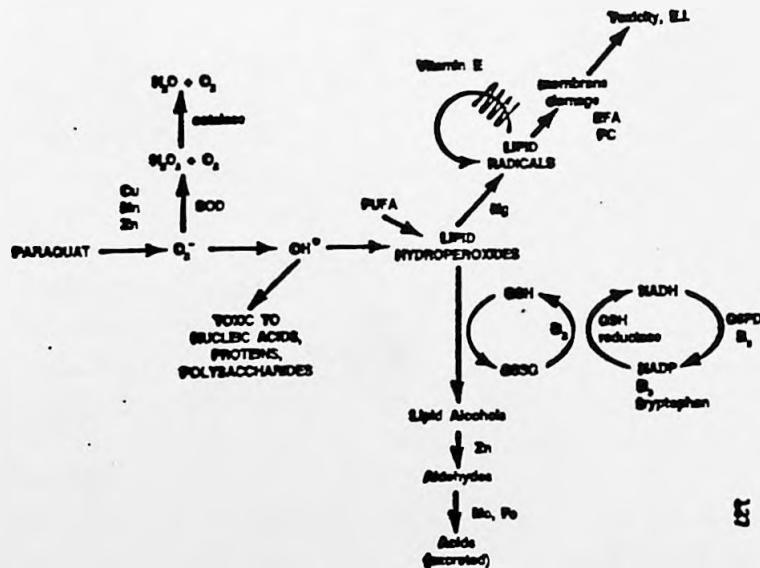
They do often bioaccumulate and many are predominantly nerve toxins, but of course all of your glands and organs can

only function through nervous input. And of course they can severely cripple many parts of the detox system and have initiated many persons E.I. They are often "hit and run" and difficult to prove, and worst of all some of them are the most poorly studied and regulated toxic chemicals known. After all, they are derived from chemical warfare, and most at least potentiate cancer if not cause it. And of course the brain and the rest of the nervous system is the most favoured target organ.

Everyone has heard of Agent Orange, Love Canal, and Times Beach: the culprit was dioxin ( 2,3,7,8 - tetrachloride dibenzo - p - dioxin, or TCDD ). It is reported to be one of the deadliest substances produced by man. Even the lowest measurable levels produced cancers in laboratory test animals. Yet municipal incinerators produce it when they bum plastics of polyvinyl chloride.

Just the garbage and leaf bags themselves are enough of a world burden, not to mention their contents and other plastics like saran and styrofoams that we discard daily.

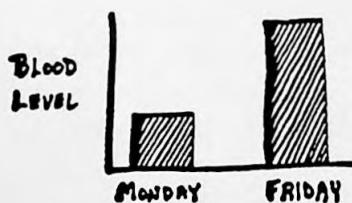
Dioxin is also a contaminant in the wood preservative pentachlorophenol ( PCP ) and is spewed into the air by the U.S.'s 104 paper mills as a result of the bleaching process. Nearly all white papers contain some dioxin; these include baby diapers, coffee filters and cups, paper plates, food packages like milk cartons, toilet paper, and paper towels. There are many scientific papers showing that benzene is a potent cause of some leukemias. Well, TCDD is a double benzene ring structure. This makes it more than doubly difficult for the body to get rid of and so it is stored in the fat of the membranes of cells which function like the computer keyboard of the body' ( Greenpeace, vol. 14, #2, Mar / Apr 1989, 1436 U St. NW, Washington, DC 20009 ).



But as long as the average consumer stays unaware and unconcerned, these and hundreds of other practices will continue. Isn't it silly that we need bleached white paper products when the natural tan and off-white shades would suffice just as well? We seem to consistently put cosmetic appeal ahead of health.

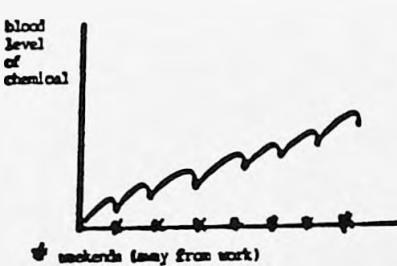
For example, pesticides silently damaged a young nurse's kidney tubules. She slowly lost magnesium (the kidneys could not absorb 95% of it as they should), and she developed multiple severe chemical sensitivities with depression, pains, seizures and other debilitating symptoms. All were uncontrolled by hospitalization and drugs as she discovered that she needed daily intravenous magnesium to keep up with the renal loss (Rea, pers. comm.).

Another factor that should be appreciated is this, suppose a person has a certain level of chemical in his blood stream after a day at work. He goes home and clears out if the house is clean enough. When he returns to work the next day, he gets another dose, and then goes home and clears out. But what if he doesn't clear out totally at home.



If they don't clear out the chemicals totally on the weekend, the result is they may feel a little better on weekends but get progressively sicker with time. Some don't feel sick until the over all accumulation reaches a critical level months or even years down the road.

What if at home he has new carpeting, fresh paint, gas heat, a new mattress and furnishings that outgas the myriad of xenobiotics that you are now aware of? By Friday his level may be much higher than it was on Monday. Hopefully he can clear out by getting some exercise outdoors over the weekend. But if he doesn't, his levels are going to go higher and higher every week, until he finally has some terrific end organ failure. It may take months or years. Meanwhile all the physicians, blood tests and x-rays are negative if he consults a physician untrained in environmental medicine.



Some people bioaccumulate chemicals through the week. They can't quite clear out all the chemicals in one day that they have accumulated.

Or imagine this scenario. Someone goes to work and has a specific blood level of xenobiotic; by noon the liver starts attempting to detoxify it and gets overwhelmed, and some of the chemical gets stored in the fat. He goes home at night and soon the blood stream is fairly empty of the chemical, so it starts coming out of the fat and back into the blood stream so that it can be further metabolized and excreted in the urine or the bile. The problem is that every time it is in the blood stream, that's when the worst symptoms occur. So these people are having symptoms when they

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load up in the office, and when they get home again they are having them when they unload. This makes the determination of where they are getting sensitized very difficult to ascertain if symptoms are experienced in both places.

You can see that pesticides can produce symptoms that can run the gamut of barely noticeable and chalked up to aging, to devastating flu-like achiness accompanied by scores of other symptoms. But because medicine cannot keep up with the pace of technology, these indolent poisonings get ascribed to such things as "a virus", or "yuppie fatigue", when in essence it's THE PESTICIDE PLAGUE.

The metabolism of pesticides, although not fully worked out, is very complex, and calls into play many of our precious nutrients. A 1981 Science vol. ( 212 ) publication showed that there was sequential decrease in mortality as vitamins essential to the detox pathways were plugged in. First they reduce the present mortality with vitamin B3 ( niacin, which goes on to form NADP ), then even more with B1 ( thiamine, which helps G6PD form NADP and recycle glutathione for reuse ).

Since we are all exposed to unseen pesticides from multiple sources on a daily basis, it is really ludicrous for anyone to suggest that Americans do not need vitamins.

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## WARM FLOORS / CLEAR HEADS

RADIANT - FLOOR HEATING and the ENVIRONMENTALLY SENSITIVE PART II  
By Lyle Jory,  
Energy Management Technologist

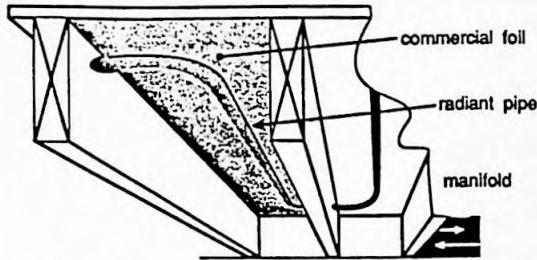
### Review

Part I of " Warm Floors / Clear Heads " appeared in the spring issue ( vol. XIV, No. 1 ) of the Allergy and Environmental Health Association Quarterly. That article provided a detailed description of radiant floor heating and its benefits to people who are environmentally sensitive. This article will cover the various installation methods used with the system.

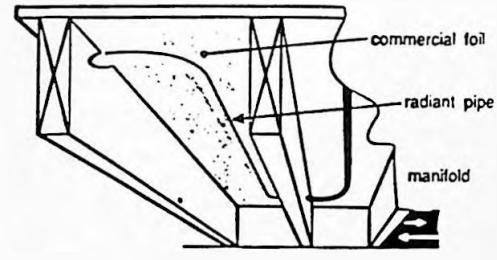
To review, the main benefit of radiant floor heating is the elimination of the hot-air ductwork in the home which can create dust and bacteria problems for some home owners. The warm floors that the radiant heating system provides also allow the use of bare ceramic tile or wood floors, thus eliminating carpets, and the chemicals and dust associated with their presence. A final benefit, which is realized not only by the environmentally sensitive but by all radiant- floor users, is the 30% saving in energy use compared to a forced-air heating system. The reasons for this energy saving were covered in some detail in the first article of this two part series.

### Installation Methods

There are a number of installation methods that can be used to integrate the piping of a hydronic radiant-floor heating



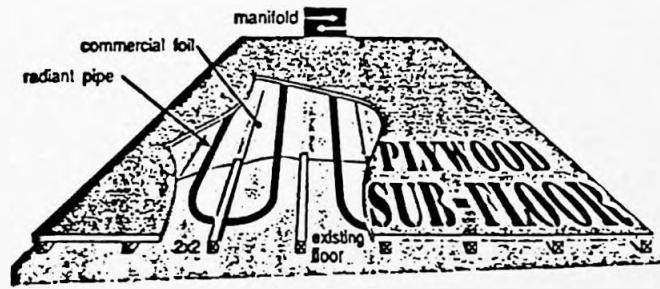
Cut-Away View of *Under-Floor Dry* Installation



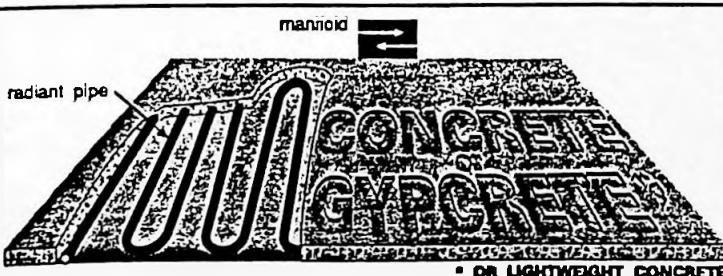
Cut-Away View of *Under-Floor Dry* Installation



Cut-Away View of *Over-Floor Dry* Installation



Cut-Away View of *Over-Floor Dry* Installation



Cut-Away View of *Wet* Installation



Cut-Away View of *Wet* Installation

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system into a building. The method to be used depends on a number of factors. First, is the installation in a new building or an existing building? If the installation is to be in a new building, consideration for the type of installation method should be considered into the structural specifications for the structure. On the other hand, if the heating system is to be retrofitted into an existing structure, how much additional weight can be added to the building structure must be taken into consideration. This will be a major factor in choosing one of the two installation methods available; wet or dry.

The wet installation technique is the most cost-effective method. It involves the use of concrete as a transfer medium to provide the building with a sustained even heat. Its major disadvantage is that it is slow to respond to a demand for heat due to the length of time it takes the concrete to attain maximum heat.

The dry installation techniques, above-floor and below-floor, are more advantageous when considering a retrofit as they add very little weight to an existing structure, and are considerably more convenient to install. They are also more responsive to changes in heat demands, however, and are not as capable of maintaining sustained heat without calling on more heat from the heat source.

### Wet Installation Method

The wet method of installing a radiant floor involves embedding the piping in a layer of concrete. There are two ways of doing this depending on the situation.

(1) Where there is to be a concrete pad, as

in a slab-on-grade, the floor is to be set directly on the ground. In a building without a basement or a basement itself, the piping is attached to the rebar or wire reinforcing mesh before the concrete is poured. The concrete is then poured in the usual way.

(2) Where there is a wood-frame floor, such as the main floor or subsequent storeys, the pipe loops are laid out on the plywood sub-floor and covered with a light weight concrete or masonry product such as Gyp-crete. At the depth of 1.5 inches this adds 12 pounds per square yard of floor covered.

### Dry Installation Method

The dry method of installing radiant-floor heating follows either an above-floor or a below-floor approach.

(1) The above-floor method involves laying the pipe loops out on the plywood sub-floor ( as in the wet method ) and then covering them with an additional sheet of plywood. This second sheet of plywood forms the new sub-floor. A grid of 1" by 2" wood strips is laid between the pipe loops to hold this second sheet of plywood at the same level as the top of the piping. Before the pipe is laid out on the sub-floor a layer of construction foil is used to cover the floor. ( editors note: order foil without tar ). This acts as a reflector to move the heat from the pipe loops into the room. The end result of this installation is the pipe is sandwiched between two layers of plywood, with no masonry covering. The sub-floor is then covered with whatever final material is desired, usually a tile or parquet to

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promote heat transfer into the room.

(2) The second dry method is the below floor method. This consists of attaching the piping to the bottom of the sub-floor in the area to be heated. This requires that the ceiling in the space below be open to allow access to the joist cavity. After the pipe has been attached to the plywood sub-floor, a layer of construction foil is attached to the bottom of the piping and floor material to provide heat reflection to the heated area above. Below the piping, the joist cavity is then insulated, if possible, to give further assurance that the heat from the system will travel up into the floor above.

### Advantages and Disadvantages

The dry method can have advantages in a retrofit application ( a preexistent building ), as it avoids the pouring of lightweight concrete or a masonry material in an existing home. This keeps the amount of weight that is added to the structure low in comparison with the wet system. The lack of masonry covering allows the system to respond to a demand for heat faster because the heat is transferred into the room quickly. If the below-floor method is used, the existing floor can be preserved. Also, the amount of disruption in the main living areas is reduced during the installation.

The wet system does have an advantage in terms of the operating cost of the system compared to an all wood system. This is the result of the lower operating temperatures that the wet system allows. These lower temperatures are possible due to the better heat transfer of the pipe embedded in the concrete. The other areas of savings come

from the lower cost of materials and reduced installation costs.

Each of the installation methods described has advantages and disadvantages. The particular method that is used will depend on the type of building and a number of other factors. If the building can accept the added weight of the masonry layer, the wet method is more efficient in terms of the installation and cost of operation. For these reasons it is the preferred method in most cases.

*Mr. Jory is an Energy Management Technologist, graduating from George Brown College, Toronto in 1988. His firm, Alternative Combined Energy Systems, begun in 1990, designs and provides materials for Polytherm radiant-floor heating systems. Anyone wishing further information on radiant-floor heating can contact Mr. Jory at Box 546, Station P, Toronto, Ontario, M5S 2T1*

## INDEPENDENCE 92 CONFERENCE

A Report By Leslirae Rotor ( Ottawa )

As an AEHA representative I, along with thousands of delegates from over 90 countries, participated in the U.N. sponsored Independence 92 Conference, held in Vancouver in April to mark the end of the decade of the disabled. The recurring theme of the conference was empowerment - assertion of the rights of the disabled to be treated with dignity, to take full control of their own lives and to be provided with the supports necessary to participate fully in every facet of life.

Perhaps the most inspiring moment occurred on the second day, during the

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opening plenary session, when the leaders of the diverse disabled organizations expressed their dreams. These are people in the process of changing the world, each with a slightly different vision, but ones which harmonize closely, and reflect dreams that many of us in AEHA share. Rick Hanson, Chair of the Conference, shared his hope that the struggle for equality in which disabled people are currently engaged will produce a society in which tolerance for diversity and the richness of varied human experience would be fully embraced. Tanis Doe, representing both the Canadian Association of the Deaf and the Coalition of Provincial Organizations for the Handicapped, a woman with multiple handicaps - she is deaf, walks with a cane, and suffers from severe environmental illness - gave an impassioned speech in sign language, simultaneously translated. She believes liberation of the disabled is ultimately linked to the liberation of people everywhere, global peace, and respect for the environment. The struggle of the disabled, of women, of the third world, of all people seeking equality, are intertwined and should be mutually supporting. She emphasized that the "oppressor cannot liberate, only the oppressed can liberate themselves : and the need to take personal responsibility in this work to ensure that the vision becomes reality". Patrick Worth, President of People First of Canada, representing people labelled mentally handicapped, gave a moving personal account of his feelings at having been treated as inferior and asserted the rights of his people to equality and dignity. Joshua Malinga from Zimbabwe, Chair of Disabled Peoples' International, linked liberation of the disabled with the struggles for liberation which take place in the third

world and called for an end of the oppression practised by the first world upon the third world.

These dreams resonated with my own. I think many of us in AEHA recognize that much of the invalidation and discrimination experienced by those of us with environmental sensitivities has stemmed from values predominant in our society and that changing the way we are treated will help to produce greater respect for all, for our environment, and perhaps ultimately a more spiritual orientation of our society. These very diverse disabled groups have created a solidarity despite their outward differences, based upon underlying common values, mutual respect and similar objectives. Until recently, AEHA has not been closely affiliated with the disabled movement, yet I was struck by how open and accepting individual delegates and official representatives were to the situation of people with environmental sensitivities. There was an acceptance of how disabling environmental illness can be for those severely afflicted, an implicit acknowledgement which many of us with E.I. rarely experience among those with whom we normally must interact. I was also surprised to find that the incidence of sensitivities among those disabled seems to be much higher than amongst the general population, or at least this disability seems to be more readily acknowledged by those who directly experience other disabilities.

It was a unique experience to live for a few days in an atmosphere where respect for one's right to participate, and to receive support necessary to participate, was

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accepted as a given. As this conference was held in an ultra-modern trade and convention centre, equipped with the latest in sealed windows, thick carpeting and modern chemical materials and furniture, I found that my ability to think and function deteriorated fairly rapidly, and I needed to take frequent breaks outside the building. None the less, this quickly became inadequate to clear my system, and I was pleasantly surprised with the attitude I received even from paramedics when I asked for oxygen. I've never before had oxygen treatment, instilled as I was with the belief that one needs to be on the point of imminent collapse before one has the right to request help, and unwilling as I am to expose myself to the usual negative attitudes that accompany many experiences with establishment medical situations. However, there was something in the air at this conference, in addition to chemicals and staleness, that gave me implicit permission to ask for something which would merely assist me to function, without requiring me to first prove the existence of my sensitivities, their objective validity, and the imminence of a state of collapse or death without treatment.

This positive experience led me to go further and envision the possibility that conferences could be held in places which would be accessible to people with sensitivities! I spoke with the manager of the conference, who was enthusiastically receptive to the idea, requested information, took copious notes, and asked for further input so that the next conference held could have improved accessibility. She suggested other services ( food, hotels, etc.) which could be approached to be made accessible as

well, so that it would be truly possible for people with sensitivities to participate more fully in future. Obviously, one intervention will not ensure that the next conference is accessible, but does demonstrate the attitude which pervaded this conference.

Despite this commitment to accessibility, the conference was a first attempt to provide accessibility for so many special needs, and things did not always run perfectly. The caucus of people disabled by blindness reacted with indignation and anger when their promised braille conference materials were not provided in an adequately, timely manner, thus significantly reducing their ability to participate on the first day of the conference.

I found individuals with disabilities to be accommodating and considerate of people with environmental sensitivities. A lady sat down next to me in a crowded workshop, looked at my badge which identified me as a representative of AEHA, promptly announced to me that she was wearing perfume and asked if I would like her to sit elsewhere. She was so matter of fact about it that I was not at all embarrassed about accepting her offer to move.

Such a positive atmosphere is inspiring in itself, but added to it were the success stories that were shared, the determination and the struggles, spiritually so much like our own, and differing only in the specifics. So much progress has been made by the disabled people's movement in the last decade, and so much yet remains, particularly on the individual level. The significant difference I noted at the Conference was that there everyone fully

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accepted their right to individualized services that would enable them to live full and productive lives. Equal services were not charity to be begged for, but were expected with a certainty born of dignity and empowerment that the means to meet one's needs must be under one's control to allow equal participation.

I could not help contrasting this with the attitudes one often finds in our own organization. Self-responsibility in AEHA circles has tended, at best, to be limited to efforts to regain our health, which has been seen as largely incompatible with advocacy for equal rights and services. Many of us have received such hostile and invalidating responses in the past that we refrain from asserting our needs or asking that these be met. Many of us in AEHA have assumed that we are the only group with individualized reactions and needs, and it was eye-opening to see the extent that this is also true of the disabled community at large.

A lesson we can learn from the disabled community is that when the needs of our most affected members have been met, then the needs of all of us will have been met and our society will benefit too, and this requires that we each insist upon our human rights, both individually and collectively. Those in greatest need are the most motivated to make the changes, but also those least able to afford the effort. While those of us still able to make a small advance to help oneself, or to join collectively to help us all, remember that even small victories change attitudes ( in others and oneself ) and are eroding the status quo at an accelerating rate.

Likewise, we in AEHA also have

something to offer the disabled community.

### THE CASE AGAINST MUNICIPAL SOLID WASTE INCINERATION

The province of Ontario banned apartment building incineration in 1989 and a ban on the construction of solid waste incinerators became law on September 11, 1992. The following information is summarized from the Ministry of the Environment's booklet "The Case Against Municipal Solid Waste Incineration".

The province acted " in response to serious human health and environmental impacts, economic considerations and waste management concerns", which persisted "even when [ stacks were ] equipped with the latest emission controls. " and were supplemented by even more dangerous compounds formed when other contaminants were subjected to the high temperatures encountered.

This toxic chemical soup can contain:

- Carbon dioxide [ global warming ]
- Carbon monoxide [ an asphyxiant ]
- Heavy metals [ lead, mercury, arsenic, cadmium ]
- Metals [ copper, nickel, selenium, vanadium, zinc ]
- Nitrogen oxides [ acid rain / smog ]
- Organic compounds [ benzene, dioxin, PCBs and phenols ]

The document states that " Scientists believe that there is no truly safe exposure level for many of the toxic contaminants emitted by incinerators." Many of these pollutants are on the ministry's [ and

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international lists, WHO ] of banned or restricted substances.

The tremendous lack of knowledge about the toxicity, transport, deposition and effects of these pollutants is noted in the following quote. " Scientists don't know enough about the long term effects of many of the hundreds of other potentially dangerous compounds produced through incineration. There is great uncertainty about how these contaminants move through the environment, how quickly they break down [ if at all ], how they combine with other pollutants, or how they can build up in the food chain. Researchers have only begun to investigate the toxic effects of these pollutants on the most susceptible members of society. We know that many toxic chemicals can be more dangerous to developing embryos and young children, workers exposed to chemicals on the job, and people who have become hypersensitive to even very low levels of hazardous contaminants."

Noting that performance data on the efficiency of incinerators is " usually conducted at new facilities operating at peak performance" and varies substantially depending on the mix of waste feed stocks, the Ministry noted that " a large load of plastics or solvents, for instance, could result in a huge surge of toxic emissions."

*This is precisely the concern expressed by the large population of often disadvantaged people, especially children, living in downtown cores where hospital incinerators designed to burn traditional garbage now burn vast amounts of metals and plastics with little or no pollution*

*control equipment, like the notorious Toronto Western hospital. This hospital even imports the waste from other hospitals to cover the downtown area with pollution where it is estimated that childhood asthma rates alone are among the highest in the world at up to twenty five percent of the population. Hundreds of hospital incinerators are exempt from the ban as are many incinerators burning sewage sludge which also contains many toxic substances. These antiquated and inadequately equipped incinerators routinely have their permits renewed without having to comply with new regulations. The most glaring example of this world class loophole is the infamous Toronto sewage sludge incinerators which are scheduled to be replaced or rebuilt outside of the requirements of the Environmental Assessment Act hearings that are going on as the permits are being issued. It is estimated that if these incinerators go ahead, the outcome of the hearings may be irrelevant because the investment in the new plant and the associated new sewage treatment plant, retention tanks and separated sewer lines will be so great that it would be financially ruinous to shut them down. Thus, not only is the province committing to an irreversible drain of billions of dollars worth of unnecessary capital expenditures but there is no expectation of either an increase of water and sewage to treat or any return on the investment.*

*This classic boondoggle will result in a generation or two of Toronto's children growing up in a toxic cloud generated by their own effluent which will result in them having to attend the hospital that*

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*them having to attend the hospital that generated the pollution, [ if they can get in when the budget is cut to cover the debt from building the sewage treatment plant and incinerators ].*

Incinerator proponents frequently quote high efficiencies for their latest equipment but even state of the art equipment is notorious for failing to operate at, or even near, design efficiency, if they can be kept operating at all. The booklet notes that " Even the newest incinerators have problems. Detroit's solid waste incinerator has operated at 60 percent of its capacity since April 1990, when the Michigan Air Pollution Control Commission revoked its permit for failing to meet mercury emission limits" and refers to a German study which found that " more dioxins and furans exit an incinerator than enter it, and the composition of dioxins and furans that exit are more toxic than those that enter."

The booklet states that garbage is transformed into combustion gasses, vapours and particulates, with up to thirty percent still left over as highly contaminated bottom and fly ash which may be classed as hazardous waste and require special treatment and disposal. It also states that incinerators are not economically viable if real costs including human health and environmental effects are taken into account.

Ministry of the Environment  
Public information centre, 135 St. Clair  
Ave. W. Toronto, Ont. M4V 1P5  
Ph:1-800-565-4923

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HEALTHY WORKPLACES**

"Our Environment Our Health" is the Ontario Premier's Council on Health, Well-being and Social Justice report on the physical environment and its impact on human health.

This report includes the built environment as a major environmental issue but the proposed Environmental Bill of Rights does not include either the built environment or the Ministry of Health within its mandate. The report sites the RIO Declaration on Environment and Development's June 1992 statement on the need for action before absolute scientific certainty is established. " Lack of scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Unfortunately, the document leans heavily on the antiquated cost theory suggesting that environmental measures will require belt tightening rather than doing the homework needed to demonstrate that environmental measures are an investment that contribute to the fastest growing sector of our economy ; an investment that substantially lowers costs, particularly health care costs which are out of control and already swallow at least a third of the total provincial budget. Feeble measures like reducing enrolment in medical schools will not change the focus or direction of the health care industry.

## THE AEHA QUARTERLY

The report recommends that we " adopt a preventive, rather than a curative approach ", without noting that the current program may actually be primarily oriented towards symptom suppression rather than curative modalities.

The report also suggests that there are approximately 40,000 chemicals in use when commonly accepted figures range from 60 to 100,000, and suggests that up to only twenty percent have been adequately tested. In fact the number of chemicals which have undergone extensive testing may only be one or two percent of those in common usage and the testing done revolves around classic concepts of toxicology rather than the much broader concepts of cause and effect which are being called for today [ neurotoxic, behavioural, synergistic, additive, etc. ].

Not only are those that have been tested actually a minute fraction of those that are actually in use, but the validity of many of the tests is being challenged more successfully every day. Although acknowledging that "relatively little is known about the potential health effects of more than 80 percent of these chemicals" the report erroneously suggests that chemicals used in drug, food and pesticide products are tested. "With the exception of those chemicals used in drugs, food additives and pesticides, there is no means to systematically asses chemicals already in commercial use." In fact regulations covering these products consist largely of exemptions, not requirements, particularly with the new category of biotechnology where risks and the need for safeguards are

being treated in a way that bears an extraordinary resemblance to the blasé' statements and even flimsier actions which governed chemicals such as DDT when pesticides were first introduced. Many of these chemicals were exempt under grandfather clauses from the requirements imposed on later chemicals but are increasingly being required to be retested contrary to the implication that "there is no means to systematically asses chemicals already in commercial use".

The report makes the truly extraordinary statement that "many products of biotechnology are not living organisms and, therefore, the process to develop them and the products themselves do not pose any special risks. ' Not only are many, if not most, of the products of biotechnology actually living organisms [ most of the research permits are apparently being issued for pesticide resistant crop development, not for medicines etc. ]. Viable [ living ], non viable [ dead ] and dormant organisms of the type most commonly found in biotechnology [ such as fungi ] can have very significant impacts on human health in each state. Allergic and sensitivity reactions which already affect a large segment of the population are typical examples.

Furthermore there is not necessarily any connection whatsoever between the viability of the products of biotechnology and the risks posed by the processes used to produce them. The report implies that " to ensure their safety, these products are required to go through the same quality control assessment processes as other agricultural and pharmaceutical products."

## THE AEHA QUARTERLY

These requirements may be totally inappropriate to biotechnology and, at any rate, as with other so called regulated products, many of the regulations consist of exemptions. And in fact, biotechnology has just been classified as a process in order to effectively exempt it from these very regulations.

Despite the alarming lack of knowledge and the amazing degree to which industry double-think has been incorporated into this document, its general statements of goals and objectives are well worth considering and I would suggest that frequent reference to them might help convert some of the work called for [ which already has been done, ie. government purchasing policies ] into requirements rather than suggestions.

Of particular interest to our Association is our inclusion in the list of notable effects from pollution. " Exposure to high levels of hazardous substances through the contamination of air, water and soil has been linked to various adverse health conditions such as cancer, respiratory illness, reproductive problems and birth defects, nervous system disorders, allergic reactions, hypersensitivity, and decreased resistance to disease."

To order a copy of the Premier's Council on Health Well-being and Social Justice Report of the Review Committee on Goal 3, January, 1993;

Ph: 416-326-6754  
or write,  
1 Dundas St. W. 25th Fl. Toronto, Ont.,  
M7A 1Y7

## CMHC RESEARCH

One of the CMHC research projects involves testing a protocol for surveying problem homes for the hypersensitive. The team is looking for problem homes to survey for moulds etc. If you have a problem home in the area of Toronto, Ottawa, Halifax or Cape Breton and would like to participate in this project please call one of the following contacts to discuss the nature of your problem in order to determine if your house is an appropriate subject

Toronto, call Ed Lowans 416-512-2628

Ottawa, call Oliver Drerup 613-836-1494

Halifax, call Robin Barret 902-864-1955

Cape Breton; call Jeff Feigin 902-258-3735

The team will develop a list of potential homes and then select approximately ten by the end of May for subsequent surveys. The survey will be for experimental purposes and will not be specifically oriented to answer client questions however the client will receive a copy of the survey after the project. Potential clients will be interviewed by phone before the final selection, and those selected will be required to sign an agreement and release form before their house can be surveyed.

The data gathered will help to test and adjust a protocol for surveying problem homes which will then be available for distribution.

## THE AEHA QUARTERLY

### **AGM Branch Workshop**

If your branch has not sent in a list of topics to National and to Chris Brown in Ottawa then it should be done right away so that an agreement on which items should be on the agenda can be arranged before the workshop. There is very little time in a workshop and branches must agree on just a few items for the process to work.

Items which can be discussed in committee form and questions requiring answers should not be subjects for a workshop. Items requiring branch and National discussion should be subjects for a workshop.

Items concerning Branch / National relations should be discussed in the workshop **before** they are addressed by the annual general meeting.

### **NOTICE**

The Allergy and Environmental Health

Association of Canada

Annual General Meeting

St. Pauls University

223 Main St. Ottawa

Friday May 28, at 11 AM

See the attached pages for full details of the sessions, tours, accomodations and agenda. Some financial statement

information is included in brief, full information will be available at the AGM.

Proxy forms should be filled out and given to a person who will vote **as you** would, not **as they** would.

### **IN MEMORY**

#### **Barbara Mowat**

Barabara Mowat passed away on April 20. Barbara's condition had deteriorated and she was in a hospital at the time. Many members will miss Barbara personally and the cause of Environmental Health will miss her dearly. For many years Barbara worked tirelessly to improve access to medical facilities on behalf of affected individuals.

Barbara had been our associations liaison with the Ministry of Health for many years and more recently had held the same responsibility for our sister organization The Environmental Hypersensitivities Association of Ontario.

Barbara had also worked with Doctors specializing in Environmental Medicine and with the Canadian Society for Environmental Medicine to establish research projects in Ontario.

### **EBY DURLAK**

Eby Durlak also recently passed away. Eby lived in a unit at the Bain Co-Op in Toronto which had been renovated under a CMHC RRAP grant. Eby will be missed by her community.

## THE AEHA QUARTERLY

### **The Allergy and Environmental Health Association Of Canada**

P.O. Box 40604,  
Burlington, Ontario, Canada,  
M7P 4W1

Ph: 1-800-695-9271

### **BRANCHES**

#### **BRITISH COLUMBIA**

1091 Gordon Drive  
Kelowna, B.C.  
V1Y 3E3

#### **HAMILTON-BURLINGTON**

356 Rankin Drive  
Burlington, Ontario  
L7N 2B4

#### **KITCHENER**

85 Longwood Drive  
Waterloo, Ontario  
N2L 4B6

#### **LONDON**

1509 Rushland Avenue  
London, Ontario  
N2L 1X6

#### **NEW BRUNSWICK**

P.O. Box 4073  
Dieppe, N.B.  
E1A 6E7

#### **NOVA SCOTIA**

P.O. Box 8212, Stn. A  
Halifax, N.S.  
B3K 5L9

#### **OTTAWA**

P.O. Box 33023  
Nepean, Ontario  
K2C 3Y9

#### **PRINCE EDWARD ISLAND**

3 Charlotte Drive  
Charlottetown, P.E.I.  
C1A 2N6

#### **WATERLOO-WELLINGTON**

11 Drew Avenue  
Cambridge, Ontario  
N1S 3R2

### **MEMBERSHIP APPLICATION**

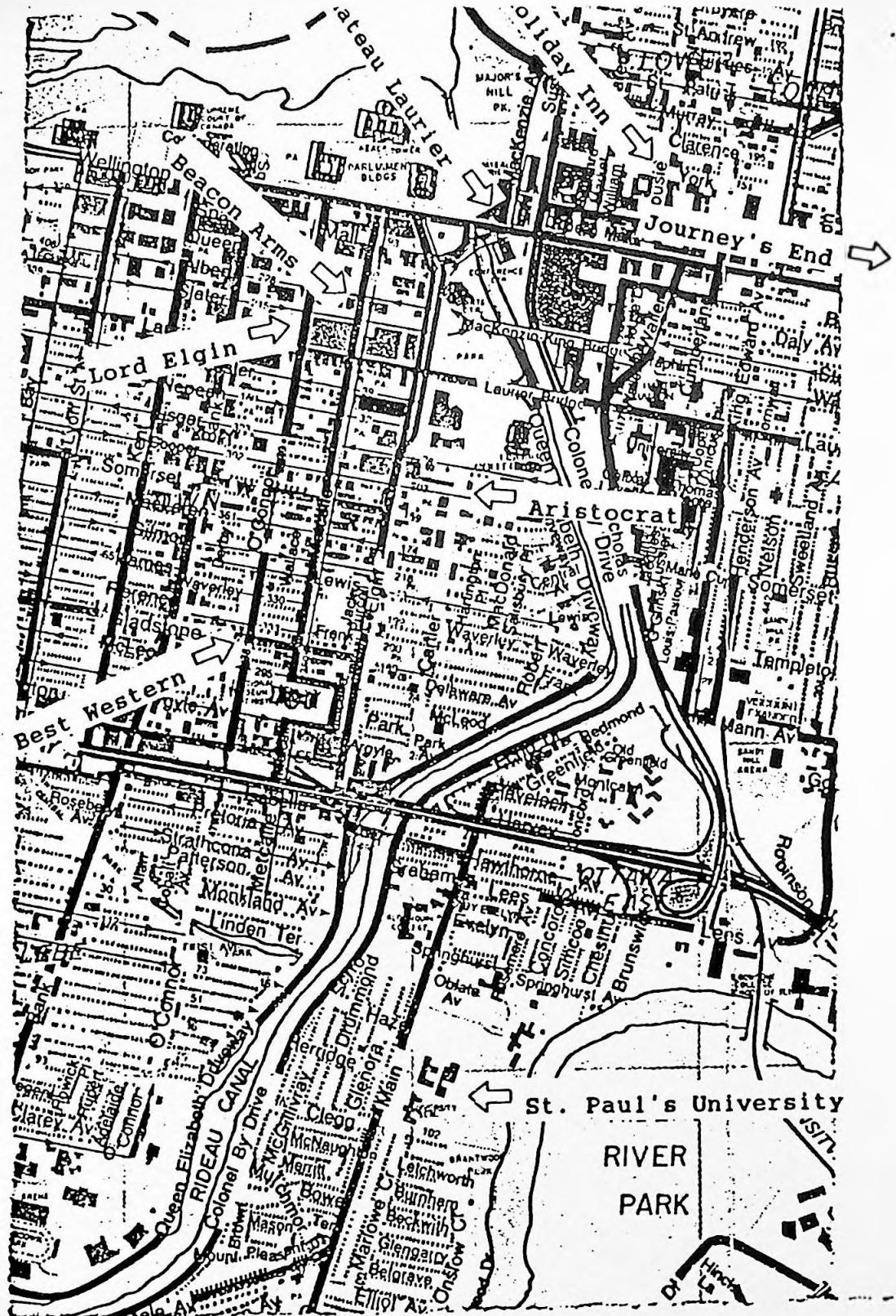
Membership including a subscription to  
the Quarterly is \$25.00 per year.  
Please print:

Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Postal Code: \_\_\_\_\_

Please enclose a cheque or money order  
made out to The Allergy and  
Environmental Health Association.  
Donations only are tax deductible.



PLEASE MAKE YOUR HOTEL RESERVATIONS  
EARLY AS HOTELS BOOK UP EARLY  
DURING MAY IN OTTAWA. YOU CAN  
ALWAYS CANCEL YOUR HOTEL  
RESERVATION IF YOU CHANGE YOUR MIND  
AT A LATER DATE!

## Hotel Accommodations (listed alphabetically!)

near National Annual General Meeting location, St. Paul's University, Ottawa (please bring your AEHA membership card to obtain the quoted rates):

|                                                                                         |                                                                                                                                                               |
|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aristocrat Suite Hotel <sup>1</sup><br>131 Cooper St. at Cartier<br>1-613-232-9471      | \$73 single/\$78 double/<br>\$83 triple/\$88 quadruple<br>ozone machine can be requested to<br>clean air; kitchenette;<br>"environmentally friendly" cleaning |
| Beacon Arms <sup>1,2</sup><br>88 Albert St. at Metcalf<br>1-613-235-1413                | \$59 single/double<br>non-smoking floor                                                                                                                       |
| Best Western Victoria Suites<br>377 O'Connor St. at Gladstone<br>1-613-567-7275         | \$75 single (studio)/\$95 double (1-<br>bedroom suite)<br>non-smoking floor/kitchenette                                                                       |
| Chateau Laurier <sup>1</sup><br>1 Rideau St. at Colonel By<br>1-613-232-6411            | \$140 single/double<br>non-smoking floor                                                                                                                      |
| Holiday Inn <sup>1</sup><br>Ottawa Market Square<br>350 Dalhousie St.<br>1-800-465-4329 | \$87 single/double<br>non-smoking floor                                                                                                                       |
| Journey's End Motel<br>290 Rideau St. at<br>King Edward Blvd.<br>1-613-789-7511         | \$68.88 single/\$78.88 double<br>non-smoking floor                                                                                                            |
| Lord Elgin <sup>1</sup><br>100 Elgin St. at Slater<br>1-613-235-3333                    | \$79 single/double<br>non-smoking floor<br>5 air ionizers available                                                                                           |
| Ottawa Bed & Breakfast<br>488 Cooper St.<br>Ottawa K1R 5H9<br>1-613-563-0161            | \$40 single/\$50 double<br>some uncarpeted facilities<br>refrigerator space possible                                                                          |

Note: Registration receipts will be available at Registration Desk, as well as name tags, tourism maps, agenda, etc.

<sup>1</sup> To be renamed Capital Hill Hotel & Suites as of May 3, 1993.

<sup>2</sup> Downtown Ottawa--walking distance to Parliament Hill, Rideau Centre shopping mall, etc.

## TREASURER'S REPORT

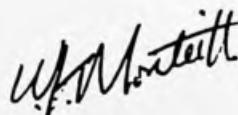
To the Members of the Human Ecology Foundation of Canada.

As treasurer and for use within the organization, I have prepared the Balance Sheet of the Human Ecology Foundation of Canada as at December 31, 1991 and the Statements of Revenue & Expenditure and Surplus and Changes in Financial Position for the year then ended.

These statements represent the consolidated information submitted from the various branches throughout Canada, except that no information was received from the British Columbia branch.

The revenue of the organization is derived primarily from membership fees, which can be satisfactorily verified, however, donation and fund raising revenue verification is limited to those amounts recorded in the accounts.

Since results of the British Columbia branch are not considered to have any significant effect on the overall financial position of the organization, and keeping in mind the limitations expressed respecting revenue verification in the preceding paragraph, I am satisfied that these financial statements present fairly the financial position of the organization at December 31, 1991, and the results of its operations and changes in its financial position for the year then ended, in accordance with generally accepted accounting principles.



August 5, 1992

Treasurer

HUMAN ECOLOGY FOUNDATION OF CANADA

STATEMENT OF REVENUE & EXPENDITURE & SURPLUS  
FOR THE YEAR ENDED DECEMBER 31, 1991

(Unaudited)

|                                            | 1991             | 1990             |
|--------------------------------------------|------------------|------------------|
| <b>REVENUE</b>                             |                  |                  |
| Membership fees                            | \$ 17,787        | \$ 22,703        |
| Donations                                  | 1,324            | 13,447           |
| Books & publication sales                  | 1,183            | 1,455            |
| Food sale                                  | 665              | 842              |
| Fund-raising & productive enterprises      | 5,991            | 5,391            |
| Interest & exchange                        | 2,397            | 4,203            |
| Trillium Foundation grant                  | -                | 16,300           |
| Conferences, net of expenses               | 880              | -                |
| Miscellaneous                              | 364              | -                |
|                                            | <u>30,591</u>    | <u>64,341</u>    |
| <b>EXPENDITURE</b>                         |                  |                  |
| <b>PROGRAM EXPENSES</b>                    |                  |                  |
| Printing & publications                    | 6,944            | 14,826           |
| Purchase of books                          | 1,483            | 886              |
| Purchase of food                           | -                | 382              |
| Postage & miscellaneous                    | 4,343            | 6,465            |
| Meetings & conferences                     | 462              | 1,546            |
| Fund raising & productive enterprise costs | 1,246            | 1,191            |
| Research & program equipment               | 7                | 231              |
| Donations                                  | 630              | -                |
|                                            | <u>15,125</u>    | <u>25,527</u>    |
| <b>ADMINISTRATIVE EXPENSES</b>             |                  |                  |
| Advertising & fund-raising                 | 352              | 224              |
| Insurance                                  | 83               | 188              |
| Bank charges & interest                    | 198              | 493              |
| Office supplies                            | 2,503            | 4,096            |
| Telephone & travel                         | 9,336            | 9,669            |
| Salaries & benefits                        | -                | 48,325           |
| Legal & audit                              | 497              | 3,439            |
| Administrative equipment                   | 2,410            | 2,799            |
| Occupancy cost & repairs                   | 2,281            | 13,002           |
|                                            | <u>17,660</u>    | <u>82,235</u>    |
| <b>Total expenditures</b>                  | <u>32,785</u>    | <u>107,762</u>   |
| <b>EXCESS OF EXPENDITURES OVER REVENUE</b> | <u>(2,194)</u>   | <u>(43,421)</u>  |
| <b>Surplus, beginning of year</b>          | <u>63,657</u>    | <u>107,078</u>   |
| <b>SURPLUS, END OF YEAR</b>                | <u>\$ 61,463</u> | <u>\$ 63,657</u> |
|                                            | =====            | =====            |

See accompanying notes

HUMAN ECOLOGY FOUNDATION OF CANADA  
 STATEMENT OF CHANGES IN FINANCIAL POSITION  
 FOR THE YEAR ENDED DECEMBER 31, 1991  
 (Unaudited)

|                                                | <u>1991</u>      | <u>1990</u>       |
|------------------------------------------------|------------------|-------------------|
| CASH AND EQUIVALENT, BEGINNING OF YEAR         | <u>\$ 49,855</u> | <u>\$ 111,427</u> |
| CASH WAS INCREASED (REDUCED) BY THE FOLLOWING: |                  |                   |
| Excess of expenditures over revenue            | (2,194)          | (43,421)          |
| Accounts receivable decrease (increase)        | 16,342           | (16,342)          |
| Prepaid expenses decrease                      | 1,042            | 209               |
| Accounts payable decrease                      | <u>(3,110)</u>   | <u>(2,018)</u>    |
| INCREASE (DECREASE) IN CASH DURING THE YEAR    | <u>12,080</u>    | <u>(61,572)</u>   |
| CASH AND EQUIVALENT, END OF YEAR               | <u>\$ 61,935</u> | <u>\$ 49,855</u>  |
|                                                | <u>=====</u>     | <u>=====</u>      |

Represented by:

|                                   |                  |                  |
|-----------------------------------|------------------|------------------|
| Cash                              | \$ 59,935        | \$ 47,855        |
| Guaranteed investment certificate | <u>2,000</u>     | <u>2,000</u>     |
|                                   | <u>=====</u>     | <u>=====</u>     |
|                                   | <u>\$ 61,935</u> | <u>\$ 49,855</u> |
|                                   | <u>=====</u>     | <u>=====</u>     |

See accompanying notes

HUMAN ECOLOGY FOUNDATION OF CANADA

NOTES TO FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 1991

(Unaudited)

NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES

Financial Statements

These financial statements include the accounts of the branches of Human Ecology Foundation of Canada and its subsidiary Allergy and Environmental Health Association of Ontario. The accounting principles used in their preparation are in accordance with generally accepted accounting principles in Canada.

Revenue Recognition

The organization uses the accrual method of accounting. Under this method, revenue is recognized as earned and expenses as incurred. Revenue from membership fees is included in income when received.

Fixed Assets

The organization expenses the cost of fixed assets in the year of acquisition.

NOTE 2 - ORGANIZATION

The organization is a "registered charity" under the Income Tax Act (Canada).

NOTE 3 - COMMITMENT

The organization leases certain equipment at the annual lease cost of \$ 2,048. This lease expires in August 1992.

# AEHA REGISTRATION FORM

## ALLERGY AND ENVIRONMENTAL HEALTH ASSOCIATION OF CANADA

"Is Your House Making You Sick?  
(How to Be Your Own Sleuth)"  
Presentation by  
Virginia Salares, Ph.D.,  
Central Mortgage and Housing  
Corporation

### National Annual General Meeting

"Barrhaven Units for the Environmentally Sensitive"  
Slide Presentation by  
Jeff Armstrong,  
Architect, Drerup Armstrong Ltd.

St. Paul's University  
223 Main Street, Ottawa, Ontario  
May 29, 1993

Please send completed Registration Form with payment by May 1, 1992, to:

ALLERGY AND ENVIRONMENTAL HEALTH ASSOCIATION  
(Ottawa Branch)  
National AGM  
P.O. Box 33023  
Nepean, Ontario K2C 3Y9

Registrations will be honoured in the order in which they are received.

Date Received in Ottawa:

REGISTRATION (please print or type)

Date \_\_\_\_\_, 1993

Name \_\_\_\_\_ AEHA Branch and Title \_\_\_\_\_

Address \_\_\_\_\_ Province \_\_\_\_\_ Postal Code \_\_\_\_\_

Telephone (\_\_\_\_) \_\_\_\_\_ Payment enclosed \$ \_\_\_\_\_ (incl. membership )

REGISTRATION FEES (include speakers, national annual general meeting, afternoon tour and mid-morning refreshments; however, tour is only available to AEHA members and the number permitted on the tour is restricted to 50--on a first-come, first-served basis, based on the date your registration form is received in Ottawa.)

Members in good standing of the ALLERGY AND ENVIRONMENTAL HEALTH ASSOCIATION (paid up 21 days before national annual general meeting):  
Before May 1st, \$13.00 After May 1st, \$18.00

Non-members: Before May 1st, \$18.00 After May 1st, \$23.00

If you would like to take advantage of the lower fee by joining the AEHA, please check here  and include the membership fee of \$25.00 in your remittance. Membership includes a subscription to the AEHA Quarterly.

*Please see overleaf for agenda and questionnaire.*

If you would like your membership attached to one of our branches to receive their branch newsletter and attend their meetings, check after the appropriate branch: British Columbia , Hamilton-Burlington , Kitchener , London , New Brunswick , Nova Scotia , Ottawa , Prince Edward Island , Waterloo-Wellington , national only .

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**AGENDA:**

Friday, May 28

8:00 p.m. Meeting of Branch Representatives

Saturday, May 29

8:30 a.m. Registration  
Display of CMHC books/brochures

9:00 a.m. Presentation by Dr. Virginia Salares:  
"Is Your House Making You Sick? (How to Be Your Own Sleuth)"

10:30 a.m. Refreshment break

11:00 a.m. Annual General Meeting

12:30 p.m. Lunch break/  
National Board Meeting (closed)

2:00 p.m. Slide Presentation by Jeff Armstrong and Tour of Barrhaven Housing Project--units designed for the environmentally sensitive

To aid in our planning, please answer the following questions (failure to answer, may mean that you will not be able to participate):

I wish to attend a meeting of branch representatives on Friday evening (bring your concerns and ideas):

Yes  No

I will need transportation between events: Yes  No

I wish to attend morning presentation: Yes  No

I wish to attend national annual general meeting: Yes  No

I wish to attend afternoon presentation and tour of Barrhaven Housing Project: Yes  No

Please indicate concerns for the agenda of the meeting of branch representatives (please use separate sheet, if needed):

---

Accommodation: list attached. Requests for billeting will be honoured in the order in which they are received. If you require a billet, please complete the following:

- I would like to be billeted with an Ottawa area family, if possible:  
Friday night: Yes  No  Saturday night: Yes  No
- I would need the use of kitchen facilities: Yes  No
- I would need transportation to and from events: Yes  No

Payment: Please make your cheque or money order payable to the Allergy and Environmental Health Association (AEHA).

For further information, call Elizabeth Stutt (613) 825-8388.  
Please complete information requested overleaf.